



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D350-591-312
Job Sheet 169947



Part No: D350-591-312

Job Qty: 5 ea

Part Name: Heli-Access-Step™ RH - High Gear, Long Step, Aerazur Float Compatible



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 1/4/18

Job Tracking No:

Due Date: 1/12/18

Created By: Mario Poulin

LATE

Type: SOLD

Description:

Customer: Airbus Helicopters - Marignane (CEURO24)

Aéroport International De Marseille Cedex Marignane Marseille, , 13725 France ph:+33 4 42 85 85 85 fx:+33 4 42 85 83 00.

Note: DWG REV B IPP Rev:A 04.03.22 New issue KJ/RF IPP Rev:B 07-06-09 Added D3572-1 JLM IPP Rev:C 08-04-02 ECN1163 DD verified by:EC IPP Rev:D 08-04-08 ECN1164 DD verified by:EC IPP Rev:D fixe route seq in born DD 10.04.28 verified by:EC

Ship Via:

* AIRBUS *

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	5 Ea	1/11/18	1/11/18	0.00	0.00	Start Up Large Fab-4		SL 1/10/18
110	Large Fab	5 pcs	1/11/18	1/11/18	0.00	5.00	Large Fab 2		SL 1/10/18
120	QC	5 pcs	1/11/18	1/11/18	0.00	0.00	QC9		PD 18-01-10
130	QC	5 pcs	1/11/18	1/11/18	0.00	0.00	QC5		PD 18-01-10
140	HandFinish	5 pcs	1/11/18	1/11/18	0.00	0.94	HandFinish1		BEB 18/01/11
150	QC	5 pcs	1/11/18	1/11/18	0.00	0.00	QC7-2		SL 18-1-11
180	Large Fab	5 pcs	1/11/18	1/11/18	0.00	5.00	Large Fab 2		PC
190	QC	5 pcs	1/11/18	1/11/18	0.00	0.00	QC10		PD 18-01-16
200	QC	5 pcs	1/11/18	1/11/18	0.00	0.00	QC5		PD 18-01-16
210	HandFinish	5 pcs	1/11/18	1/11/18	0.00	0.94	HandFinish1		2018/01/15 JSL
220	Powdercoat	5 pcs	1/11/18	1/11/18	0.00	1.49	Powdercoat1		BR 18-01-16
230	HandFinish	5 pcs	1/12/18	1/12/18	0.00	0.94	HandFinish3		BEB 18/01/17
240	QC	5 pcs	1/12/18	1/12/18	0.00	0.00	QC3		3-26
250	Packaging	5 pcs	1/12/18	1/12/18	0.00	0.00	Packaging1-3		SL 18-1-2018
260	QC	5 pcs	1/12/18	1/12/18	0.00	0.00	QC4		SMF
265	DC	5 pcs	1/12/18	1/12/18	0.00	0.00	DC		AJT
270	Packaging	5 pcs	1/12/18	1/12/18	0.00	0.00	Packaging3-1		1/10
280	QC21-FG	5 Ea	1/12/18	1/12/18	0.00	0.00	QC21		1/10

Part Op 110 - 1-Bevel end for welding FWD ONLY 2-Weld Support using Jig DT10115, weld Fwd End Plate as per QSI 004 & Descriptions: Dwg D3272 A/R Aluminum Rod _____ 3-Grind End Plate flush

180 - 1-Assemble Leg Assembly as per Dwg D3272. 2-Leave one rivet out until welding is complete. 3-Bevel Aft end for welding 4-Inspect for foreign object as per QSI 024 5-Weld Aft End Plate as per QSI 004 & Dwg D3272 A/R Aluminum Rod _____ 6-Grind End Plate flush 7-Install last rivet as per Dwg.

220 - START TIME: 2:45 OVEN TEMPERATURE: 350° FINISH TIME: 3:15

265 - Photocopy bluefile and type labels as per PPP D350-591-312 CHG001

270 - Identify and pack for shipping as per PPPD350-591-312 Location : FG072

wing walk M138711

F9084 sold.

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
-----------	----------------	----------	-----------	-----------	---------

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			

Date :	Step #:	QTY Effective :	MRB (QSI042) Approval
--------	---------	-----------------	-----------------------

Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause <table> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>		Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	FAULT CATEGORY <table> <tr><td>Pressure/Forced</td><td>☐</td><td>Temperature/Cure</td><td>☐</td><td>Power Loss/Surge</td><td>☐</td><td>Positioned Wrong</td><td>☐</td></tr> <tr><td>Bending</td><td>☐</td><td>Set-up</td><td>☐</td><td>Folio/Program</td><td>☐</td><td>Outside Dimensions</td><td>☐</td></tr> <tr><td>Centre Not Concentric</td><td>☐</td><td>BOM/Route</td><td>☐</td><td>Grain</td><td>☐</td><td>Over/Under tolerance</td><td>☐</td></tr> <tr><td>Cracks</td><td>☐</td><td>Broken/Damage/Defect</td><td>☐</td><td>Weld</td><td>☐</td><td>Part Incorrect</td><td>☐</td></tr> <tr><td>Crimp/Kink/Ripple/Wave</td><td>☐</td><td>Inspection Incomplete/Unqualified</td><td>☐</td><td>Wrong Stock Pulled</td><td>☐</td><td>Part Lost/Missing</td><td>☐</td></tr> <tr><td>Cuffs</td><td>☐</td><td>Contamination</td><td>☐</td><td>Out of Sequence</td><td>☐</td><td>Part Moved</td><td>☐</td></tr> <tr><td>Crushing</td><td>☐</td><td>Countersink</td><td>☐</td><td>Off-set</td><td>☐</td><td>Drawing</td><td>☐</td></tr> <tr><td>Heat Treat</td><td>☐</td><td>Cut Too Short</td><td>☐</td><td>Mislabeled</td><td>☐</td><td>Finish</td><td>☐</td></tr> <tr><td>Wave/Twist in Tube</td><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td><td>Fit/Function</td><td>☐</td><td>Misread</td><td>☐</td></tr> <tr><td>Marks/Chatter</td><td>☐</td><td>Drill Holes</td><td>☐</td><td>Misaligned/off center</td><td>☐</td><td>Turning Sequence</td><td>☐</td></tr> </table>				Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Environment	☐	No Re-verification	☐																																																																																																																																		
Design	☐	Operator	☐																																																																																																																																		
Doc/Data	☐	Offset/Setup	☐																																																																																																																																		
Equip/Tooling	☐	Supplier	☐																																																																																																																																		
Handling/Pre	☐	Training	☐																																																																																																																																		
Material	☐	Use for Testing	☐																																																																																																																																		
Internal Transport	☐	Poor Information	☐																																																																																																																																		
Tribal Knowledge	☐	Rushing	☐																																																																																																																																		
LOA	☐	Product Improvement	☐																																																																																																																																		
Substation	☐	Process Improvement	☐																																																																																																																																		
Past Expiry Date	☐	Manufacturing Process	☐																																																																																																																																		
Misidentified	☐	Past Due	☐																																																																																																																																		
Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐																																																																																																																														
Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐																																																																																																																														
Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐																																																																																																																														
Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐																																																																																																																														
Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐																																																																																																																														
Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐																																																																																																																														
Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐																																																																																																																														
Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐																																																																																																																														
Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐																																																																																																																														
Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐																																																																																																																														
OTHER : _____																																																																																																																																					

90-Start up Operation

180-Large Fab

250-Packaging

✓ D3067-1	5012005	5	5030105	18	0	0
✓ D3219-1	5026612	10	5030106	54	0	0
✓ D3272-1	5029910	5	5030107	0	0	0
✓ D3065-041	5030236	5		14	0	0
✓ D3066-1	5012395	10		90	0	0
✓ D3067-1	5030168	5		18	0	0
	MS20600-AD4W4	80	5016823	1,447	0	0
- AN3-35A	5033045	10		268	0	0
- AN4-13A	5033044	40		1,299	0	0
- AN5-36A	5033043	10		194	0	0
- D2230-3	5033042	20		179	0	0
- D2618	5033040	10		190	0	0
- D2856-400	-720 5033083	10		155	0	0
- D3235-1	5033080	10		67	0	0
- D3278-041	5021182	5		23	0	0
- MS21042L3	5033077	10		3,336	0	0
- MS21042L4	5033075	40		3,684	0	0
- MS21042L5	5033071	10		759	0	0
- NAS1149D0363J	5033067	20		4,434	0	0
- NAS1149D0463J	5033066	80		5,772	0	0
- NAS1149D0563J	5033065	20		1,319	0	0

Part Specifications

Specifications could not be found.

Plex 1/4/18 8:45 AM dart.poulin.mario



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Heli - Access - Step RH - High Gear, Long Step, Aerazur
Float Compatible

PART NO: D350 - 591 - 312

Revision:

Operation: Large Fab

Change No: CHG002

Mfg Date: 01/10/18
Job No: 169947

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐



Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS			
	Rework ☐	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐
	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
	Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐	

QTY Effective : _____

MRB (QSI042) Approval

	Disposition	
		Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

FAULT CATEGORY

☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Set-up	☐ Folio/Program	☐ Outside Dimensions
☐ BOM/Route	☐ Grain	☐ Over/Under tolerance
☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect
☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Contamination	☐ Out of Sequence	☐ Part Moved
☐ Countersink	☐ Off-set	☐ Drawing
☐ Cut Too Short	☐ Mislabeled	☐ Finish
☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread
☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence

Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X						D350-591-213	Hel-Access-Step™, Short Step – High Skid, LH
	X					D350-591-214	Hel-Access-Step™, Short Step – High Skid, RH
		X				D350-591-215	Hel-Access-Step™, Short Step – Low Skid, LH
			X			D350-591-216	Hel-Access-Step™, Short Step – Low Skid, RH
				X		D350-591-311	Hel-Access-Step™, Long Step – High Skid, LH
					X	D350-591-312	Hel-Access-Step™, Long Step – High Skid, RH
1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
				1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
					1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
2	2	2	2	4	4	D2230-3	MOUNTING LUG
2	2	2	2	2	2	D2618	BUSHING
4	4	4	4			D2732-030	CUSHION
				2	2	D2856-400-720	ABRASION STRIP
2	2	2	2	2	2	D3235-1	MOUNTING LUG
				1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	AN3-35A	BOLT
				8	8	AN4-13A	BOLT
4	4	4	4			AN4-15A	BOLT
2	2	2	2	2	2	AN5-36A	BOLT
4	4	4	4	4	4	NAS1149D0363J	WASHER (AN960JD10)
12	12	12	12	16	16	NAS1149D0463J	WASHER (AN960JD416)
4	4	4	4	4	4	NAS1149D0563J	WASHER (AN960JD516)
2	2	2	2	2	2	MS21042L3	NUT
6	6	6	6	8	8	MS21042L4	NUT
2	2	2	2	2	2	MS21042L5	NUT
				1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 15 for installation of the DSI 9410-011 Kit.

Change Record

PAGE 1 OF 1

Part Number: D350-591-311/-312 (EURO P/N: 704A 41 640 012/-011)

Description: HELI-ACCESS STEP, HIGH SKID, LONG STEP, LH/RH

[illegible]